Statement of Senator John D. Rockefeller IV
For the Record

MR. ROCKEFELLER. Mr Chairman, today I would like to once again stress how important strong and stable R&D funding, along with efficient technology transfer is to our nation's prosperity. Together, you and I have been fighting to raise awareness of the pressing need to make R&D a national priority. Yet, once again, it seems to be at the bottom of many priority lists in Washington. I was disappointed to see that the majority's budget resolution fails to meet the threshold we have set for funding research and development. And while the President's budget does meet our threshold in fiscal year 2000, funding levels appear to remain flat or drop in the following years.

With as much as 50% of our economic growth now based upon technological innovation, the strength of our scientific R&D is a key determinant of our nation's economic well-being. For this reason, Senator Frist and I reintroduced the Federal Research Investment Act, S. 296, in January. This legislation sets a long-term vision for federal research and development funding that will allow the United States to continue to be the world's high-tech leader.

This is a very important time in our history. You only need to look as far as the front page of the newspaper to see the effect of high-technology on our country. New drugs are becoming available for fighting cancer; new communication hardware is allowing more people to connect to the Internet; and advances in fuel-cell technology are leading to low-emission, high-efficiency hybrid vehicles. In fact, seventy percent of all patent applications cite non-profit or federally-funded research as a core component to the innovation being patented. People are living longer, with a higher quality of life, in a better economy due to federally-funded research.

Unfortunately, it appears that many people believe these products simply appear out of nowhere. In fact, they are the result of a basis of knowledge, which has been built up by researchers supported by federal funding. And they are the result of successfully transferring federally generated technology to the business community, where it can then be developed and commercialized for the public sector. In this manner, American companies can pull from this research knowledge base to develop the latest high-tech products which you and I read about in the paper and see on our store shelves.

I view our science and engineering research knowledge base as a bank. The US government puts in modest amounts of funding in the form of support for scientific research. The payback comes from the economic growth which is produced. That is the good news.

The bad news is that the United States has been withdrawing more than it has been depositing for several years now. For the second year in a row we are looking at an overall budget surplus. A large part of the current rosy economic situation is due to our dominate high-tech companies, which are currently responsible for one-third of our economic output and half of our economic growth. However, we have not been supporting the fundamental, pre-competitive research at the levels necessary to continue at this pace. We must act now in order to try to correct this situation.

Over two years ago, Senators Gramm and Lieberman introduced the National Research Investment Act. Last year Senator Frist and I took the next step and introduced the Federal Research Investment Act, which passed the Senate by unanimous consent, but never became law. The progress of this bill has proved to be extremely effective in pulling together members of the scientific and engineering community to fight together, and we've seen additional positive signs. In fact, the administration's number's for fiscal year 2000 are right on target with our authorizing numbers, though R&D funding is projected to become static or reduced in future years. Unfortunately the recent congressional budget resolutions appear to put us right back where we started, with funding decreases proposed for fiscal year 2000 and large downward declines projected for future R&D spending out to 2004.

If we want to continue to enjoy the economic gains that have been provided by technology, then now is not the time to turn our back on research development.

The Federal Research Investment Act creates legislative language which stresses the importance of R&D funding to the future strength of our nation. It sets guidelines for Congress to use in prioritizing funding decisions and creates a system for making sure that the funds are well-spent. Most importantly, our bill authorizes an annual funding increase of 5.5% for the next 11 years for federally-funded, civilian, R&D programs. It would cause a near doubling of R&D funding in approximately 12 years.

Many, if not most, recent 'quantum leaps' in knowledge have occurred at the interface between traditional disciplines of research. Therefore, we legislatively mandate that this funding increase must be balanced, so that there is not preferential growth of one agency, program or field of study at the expense of other, equally qualified and deserving agencies.

We must also remember, however, that none of the projected economic gains of R&D will occur if we don't get our research discoveries commercialized. Technology transfer allows our industries to remain at the leading edge in their field, and I have strongly supported the need to streamline the process. In 1995 I worked on the Technology Transfer Improvement Act, which allows for easier and quicker access to intellectual property which the government owns and private industry wants. Yesterday, along with Senator Frist, I introduced the Technology Transfer Commercialization Act of 1999. This bill clarifies and adjusts current law to allow for an even better working relationship between government and industry.

I remain concerned, though, that technology transfer is not occurring as efficiently and effectively as it could or should be. Despite the potential that exists in our federal labs and universities, only about 10% of the federally owned patents filed were ever used. I look forward to hearing from our witnesses today on what problems might exist and how we can fix them.

Finally, I want to note that one of the original reasons that I got involved with these issues was because I believe that technology should be shared by everyone. The legislation that Senator Frist and I are working on are not a means of promoting elitist science but rather are mechanisms for allowing for diversity in our national innovation infrastructure.

Federal investment in research and development has produced enormous economic benefits for this country, and improved the lives of our people. However, with the end of the cold war and the increasing demands on the discretionary portion of the Federal budget, it is vital that we review our needs, and put in place a sensible plan for the future. I encourage other Senators to join with Senator Frist and I in pursuing a long-term plan for funding that will allow our nation to maintain the research infrastructure that has been so important to the strength of our country.